

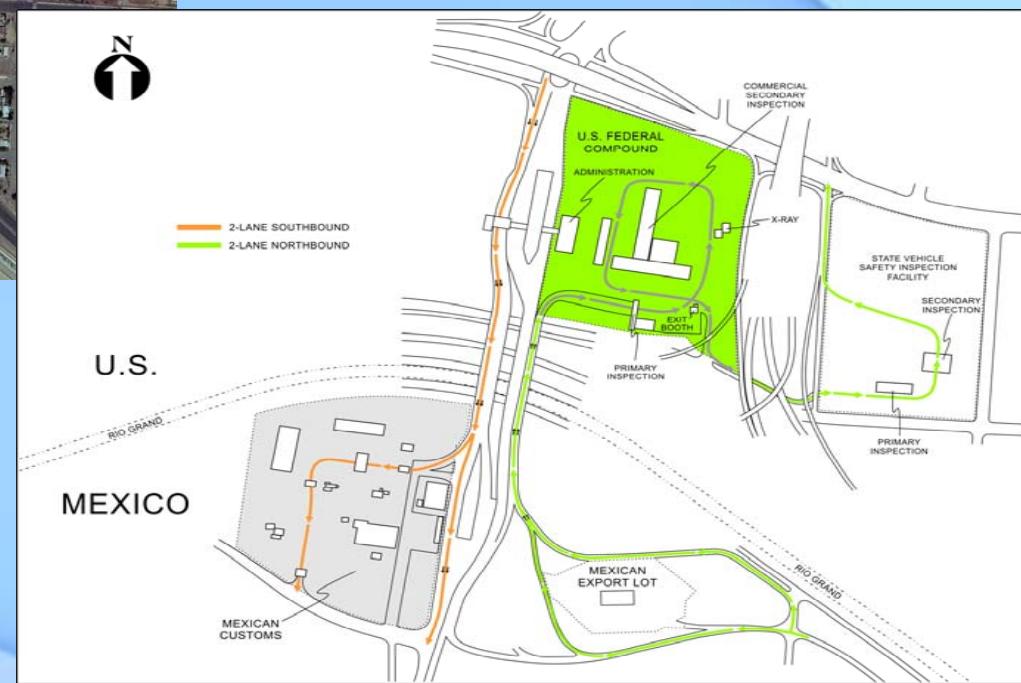
Border Emission Reductions

By

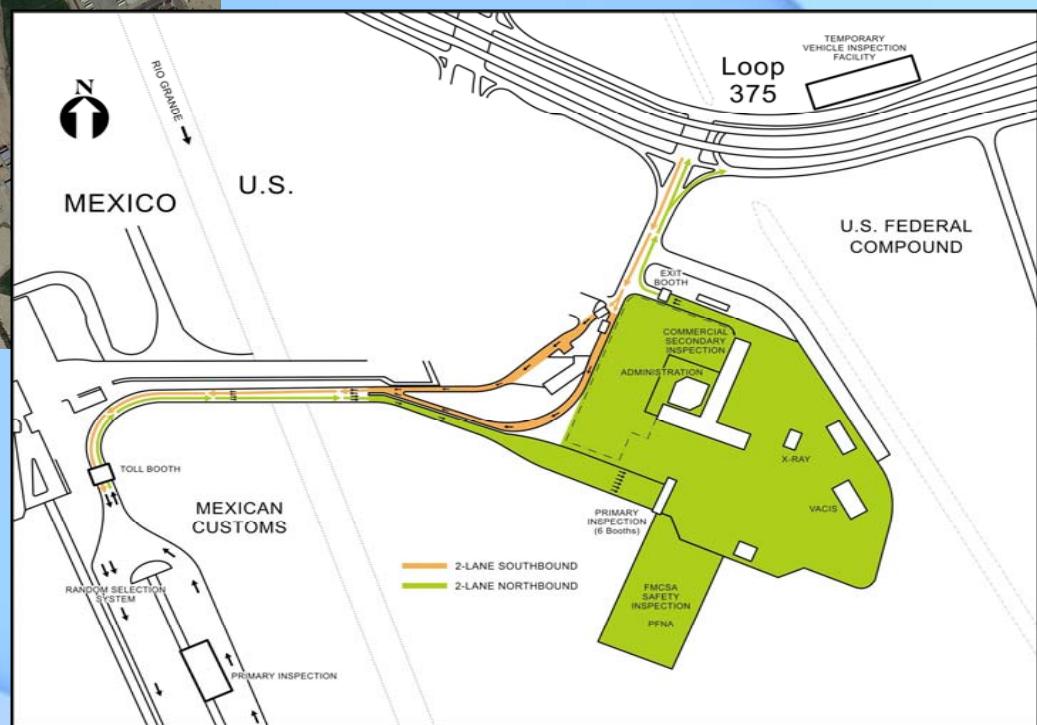
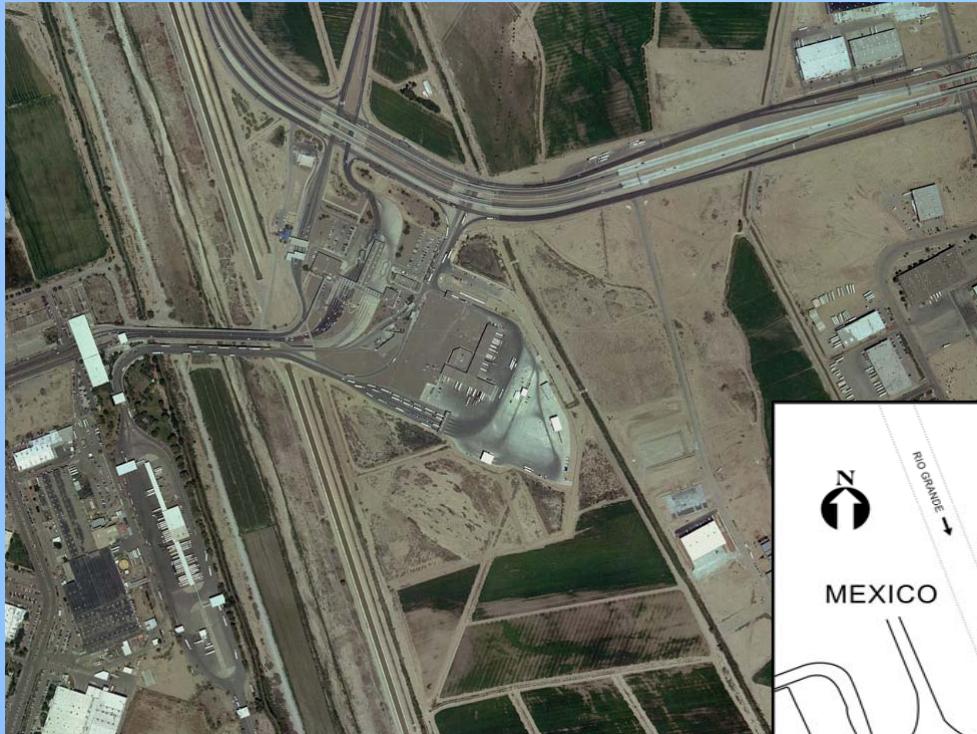
Joe Zietsman

Texas Transportation Institute

Bridge of the Americas



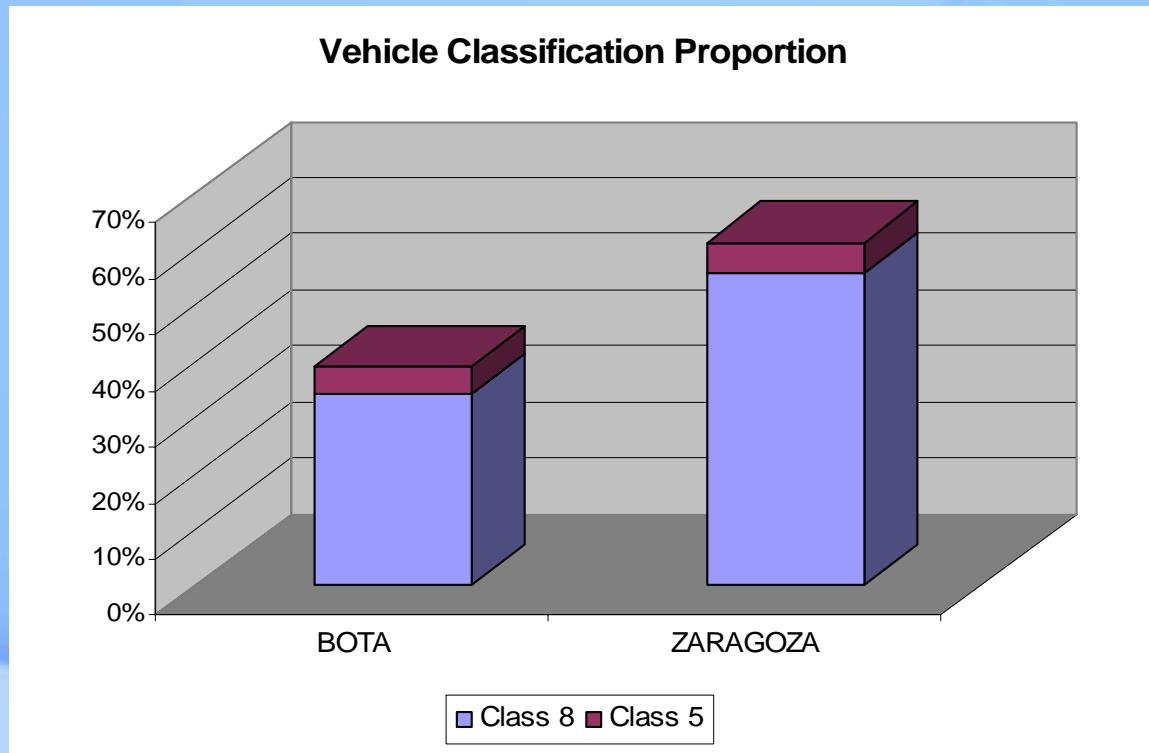
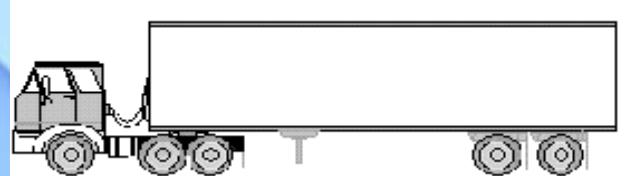
Zaragoza Bridge



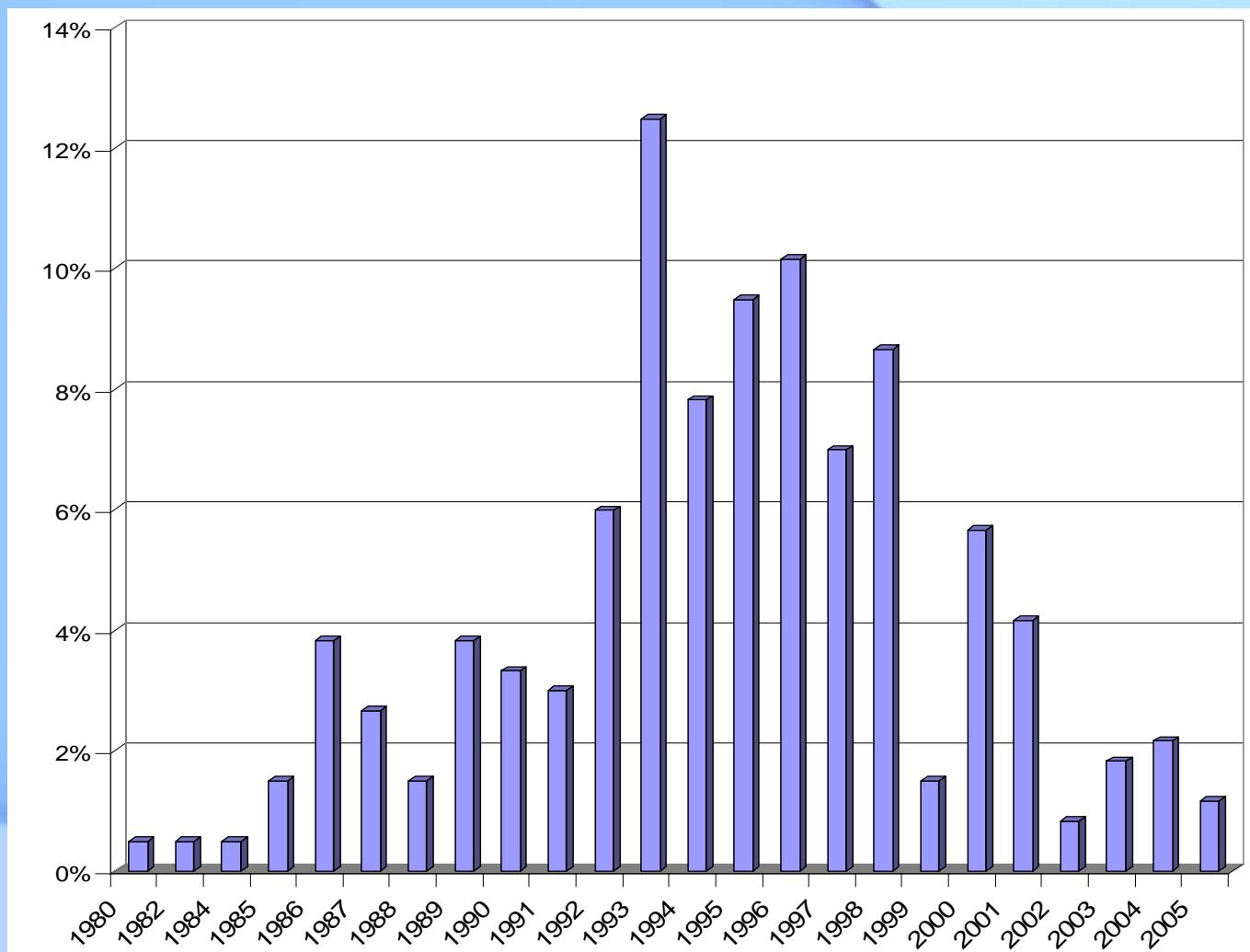
Test Site



Truck Profiles



Truck Age Profile



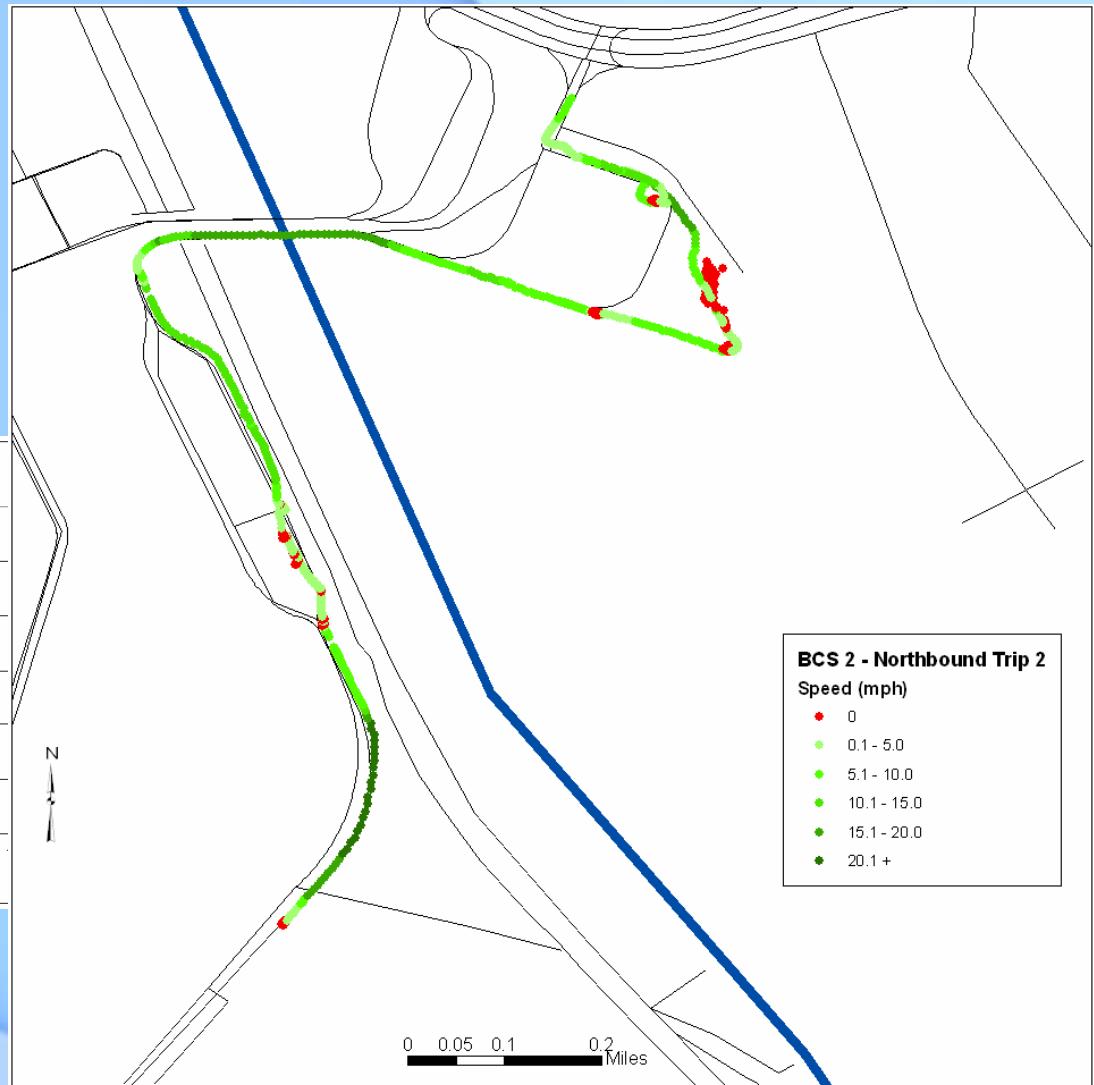
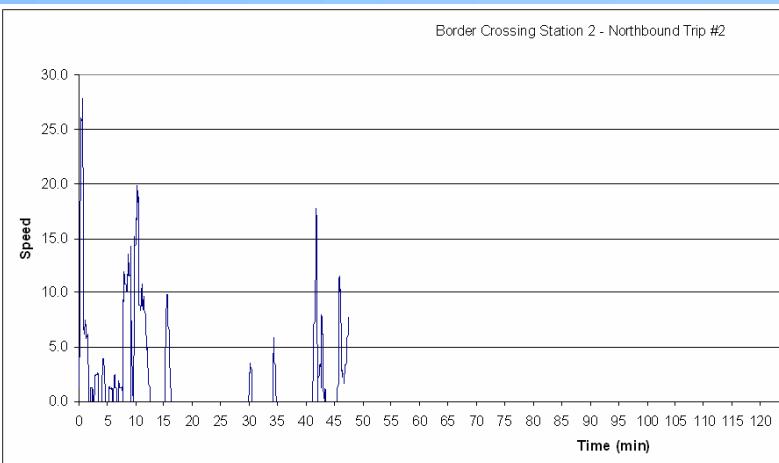
FAST Process

- Free And Secure Trade (FAST)
- Improve security through incentive
- Customs Trade Partnership Against Terrorism (C-TPAT)
- Carriers and importers enrolled



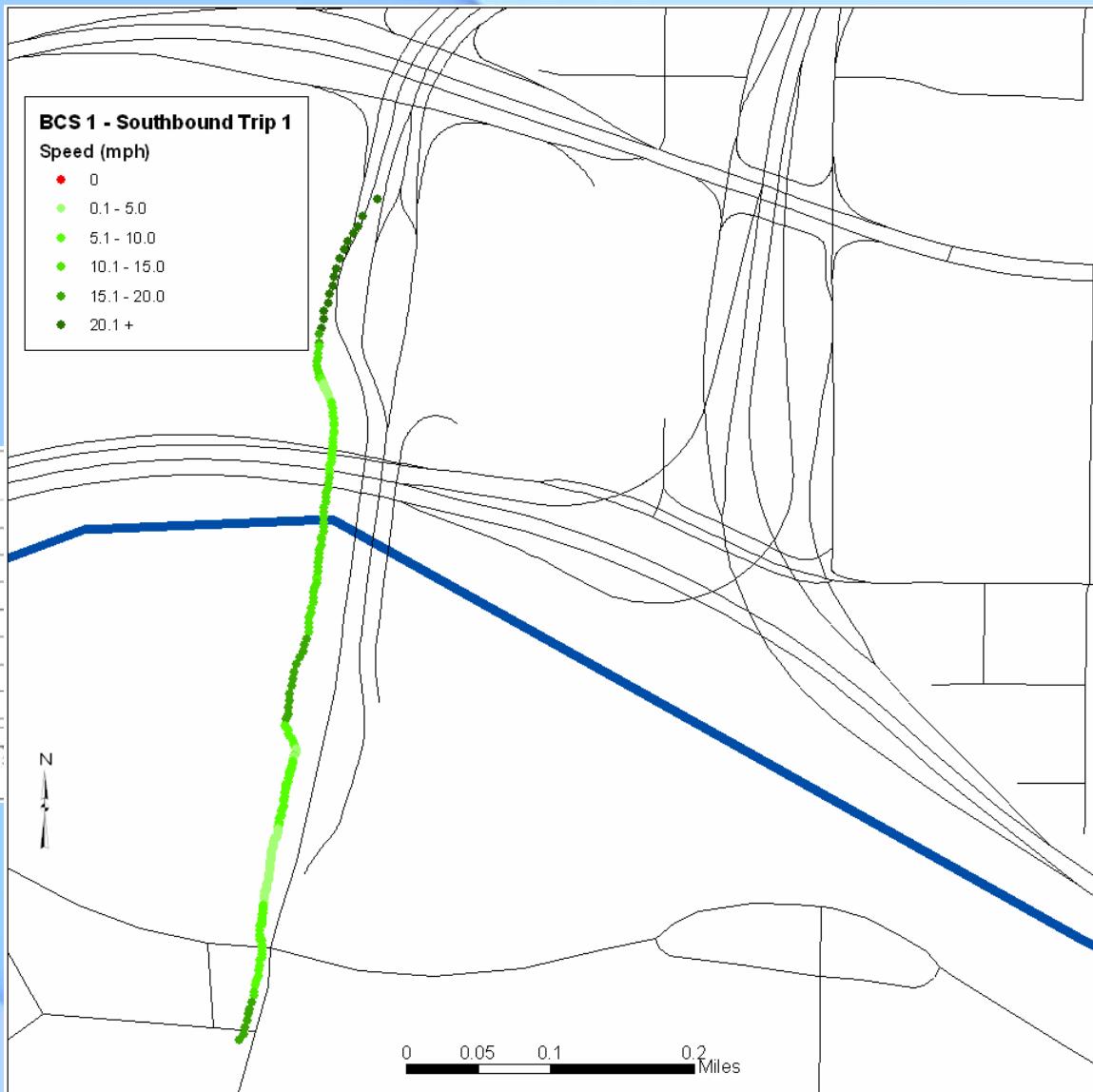
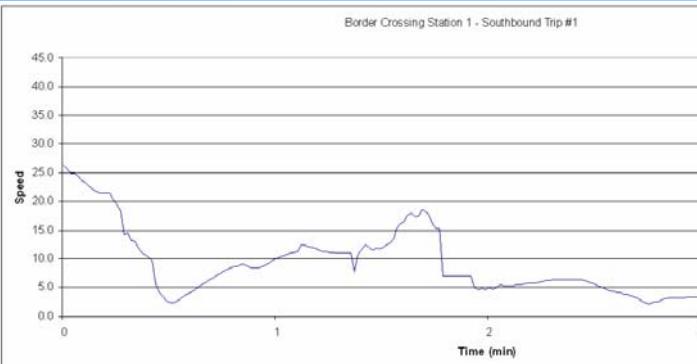
Zaragoza Border Crossing

Drive Cycles - Northbound

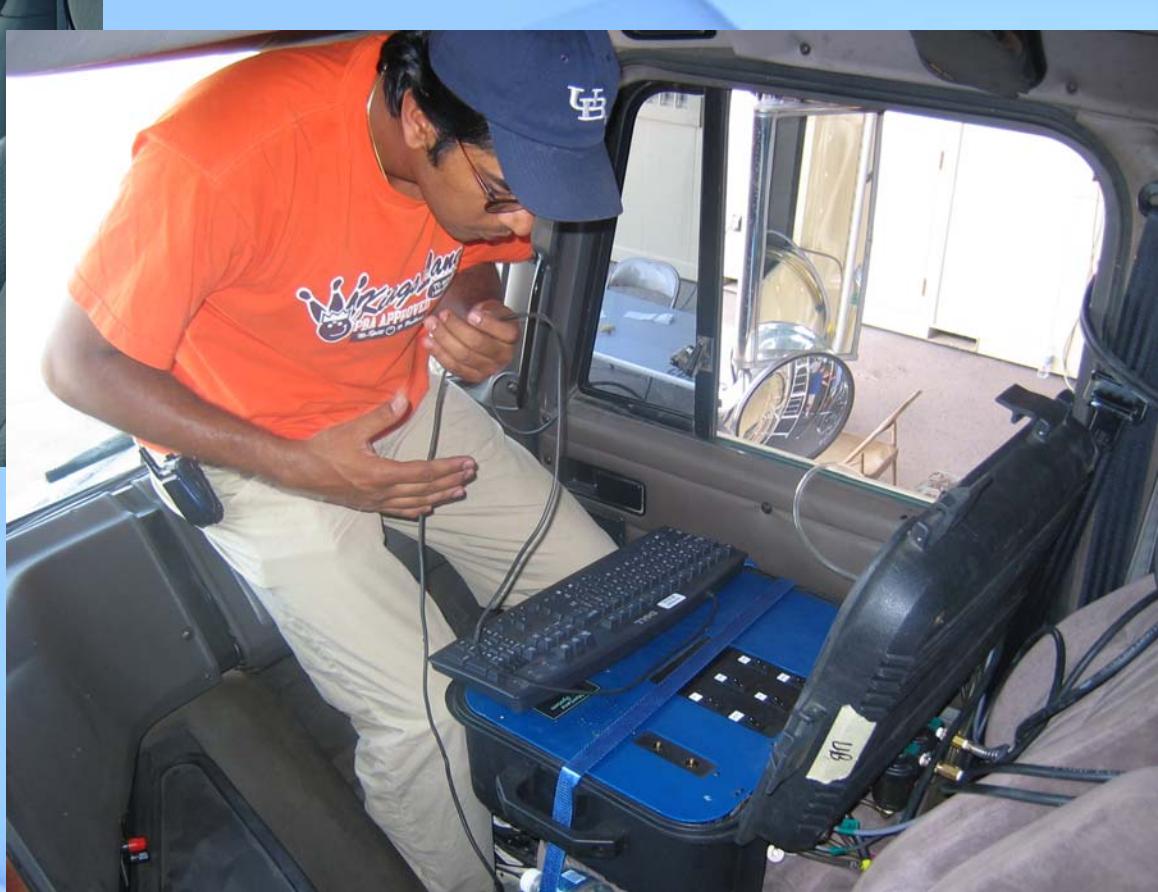


BOTA Border Crossing

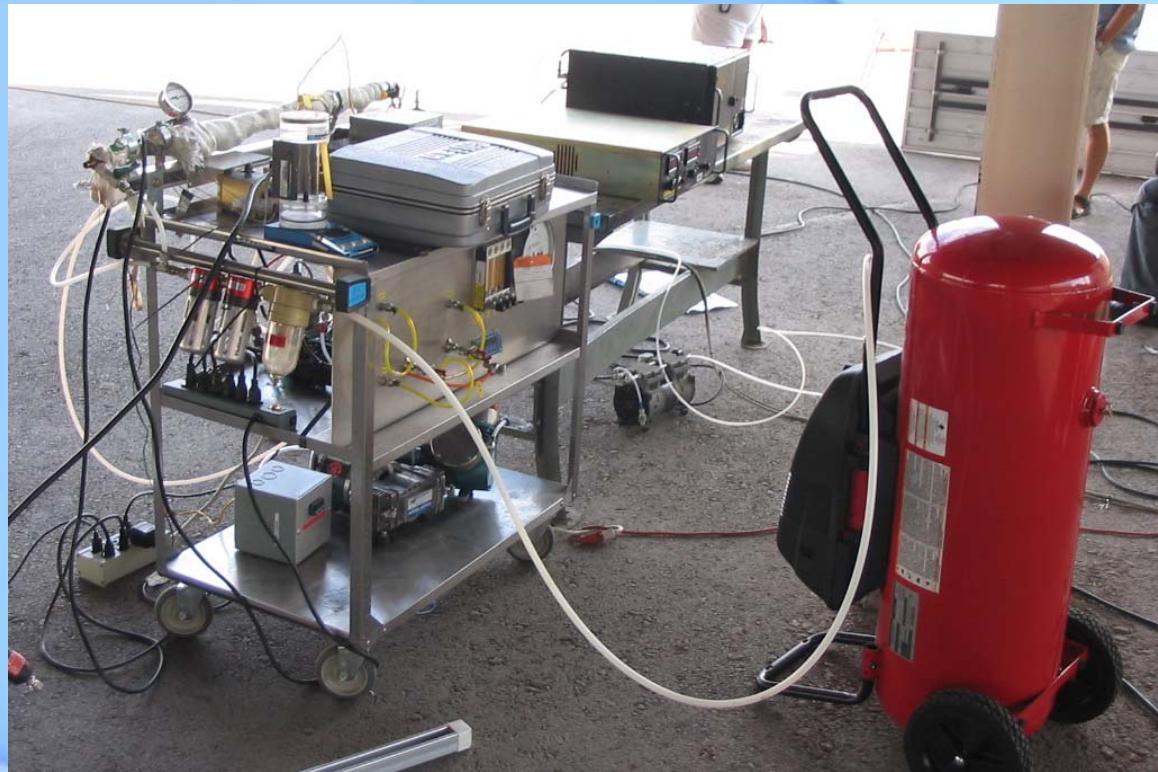
Drive Cycles - Southbound



PEMS



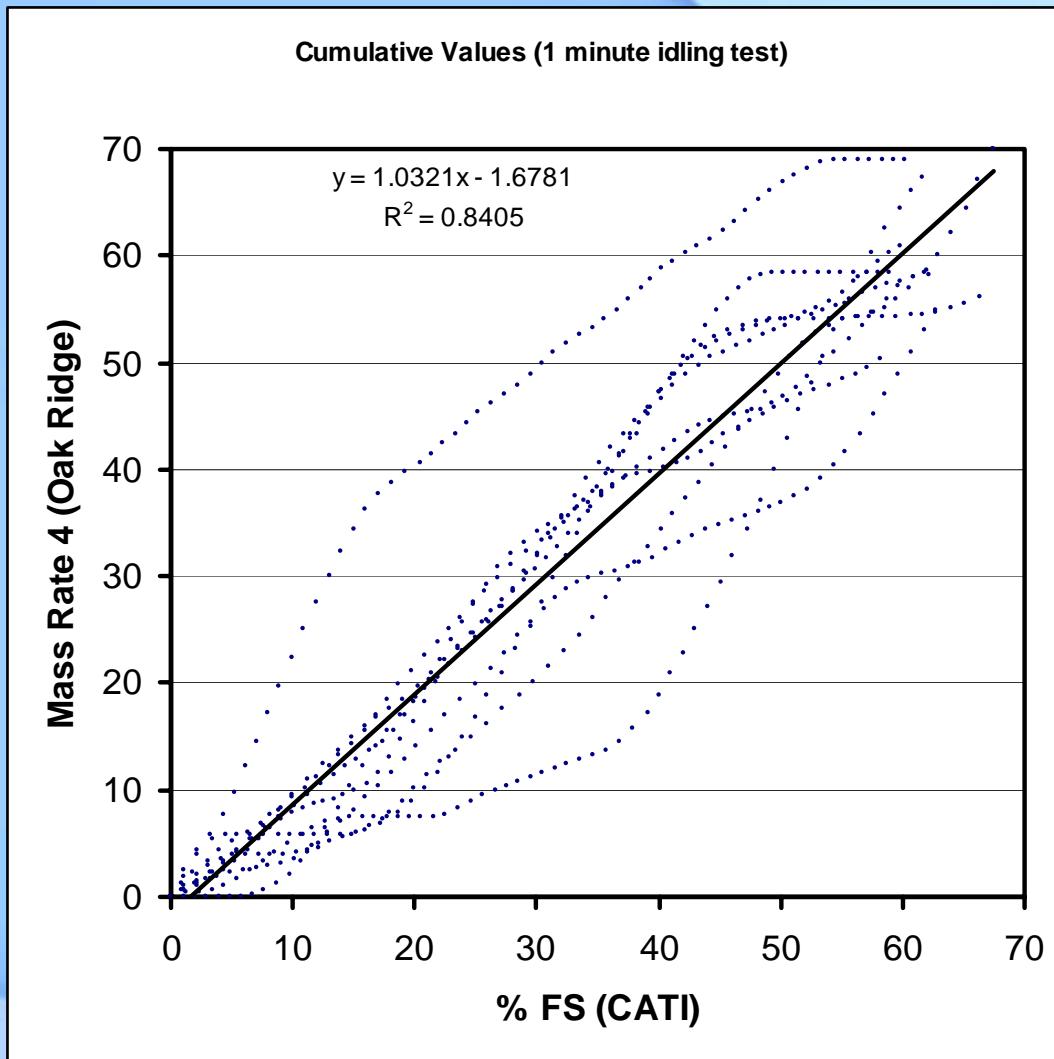
Gravimetric and TEOM



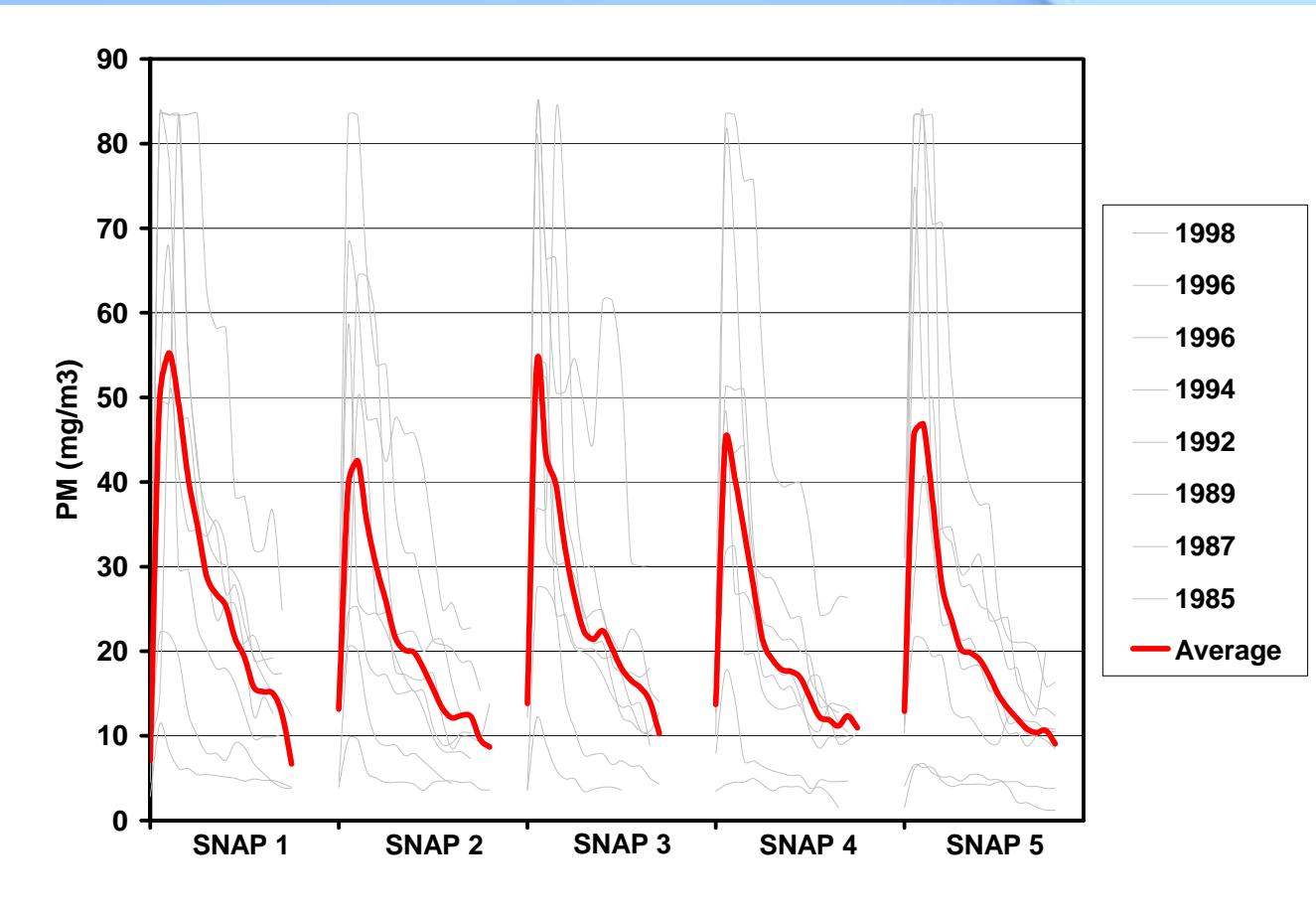
Equipment Installed



Initial Correlation



Idling Emissions



Conclusions

- Coordination
- Logistics
- Fleet profile
- Travel profile
- Emissions profile
- Strategies

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